

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

COSMOKEY SOLUTIONS GMBH & CO. KG,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 18-1477-JLH-CJB
)	
DUO SECURITY, INC. n/k/a DUO SECURITY)	JURY TRIAL DEMANDED
LLC and CISCO SYSTEMS, INC.,)	
)	
Defendants.)	

FINAL JURY INSTRUCTIONS

TABLE OF CONTENTS

	Page
I. GENERAL INSTRUCTIONS.....	1
1. Introduction	1
2. Jurors’ Duties.....	2
3. Evidence Defined	3
4. Direct and Circumstantial Evidence.....	5
5. Consideration of Evidence	6
6. Statements of Counsel	7
7. Credibility of Witnesses	8
8. Expert Witnesses	9
9. Deposition Testimony.....	10
10. Use of Notes	11
11. Burdens of Proof	12
II. THE PARTIES AND THEIR CONTENTIONS	15
III. CLAIM CONSTRUCTION	16
1. Claim Construction Generally.....	16
2. Claim Construction for the Case	17
IV. INFRINGEMENT	18
3. Direct Infringement—Literal Infringement	21
4. Joint Infringement	24
5. Infringement of Independent and Dependent Claims	25
6. Infringement of “Comprising” Claims	27

7.	Infringement Under the Doctrine of Equivalents	28
8.	Inducing Patent Infringement.....	30
9.	Contributory Infringement	33
10.	Prior Commercial Use Defense to Infringement.....	35
V.	INVALIDITY	37
1.	Prior Art.....	38
2.	Prior Art Considered or Not Considered by the Patent Office	39
3.	Perspective of One of Ordinary Skill in the Art	40
4.	Anticipation	42
5.	Obviousness	43
6.	Written Description	50
7.	Indefiniteness	53
VI.	DAMAGES	55
1.	Date Damages Begin.....	57
2.	Reasonable Royalty	58
3.	Reasonable Royalty Definition—Using the “Hypothetical Negotiation” Method 60	
4.	Reasonable Royalty—Relevant Factors If Using the Hypothetical Negotiation Method 61	
5.	Reasonable Royalty—Apportionment	63
6.	Reasonable Royalty—Timing	65
7.	Reasonable Royalty—Availability of Non-Infringing Substitutes.....	66
8.	Reasonable Royalty—Use of Comparable License Agreements	67

9. Willful Infringement.....	68
VII. DELIBERATION AND VERDICT	70
VIII. UNANIMOUS VERDICT	71
IX. DUTY TO DELIBERATE.....	72
X. SOCIAL MEDIA.....	73
XI. COURT HAS NO OPINION.....	74

I. GENERAL INSTRUCTIONS¹

1. Introduction

Members of the jury, now it is time for me to instruct you about the law that you must follow in deciding this case. Each of you has been provided a copy of these instructions. You may read along as I deliver them if you prefer.

I will start by explaining your duties and the general rules that apply in every civil case. Then I will explain some rules that you must use in evaluating particular testimony and evidence. Then I will explain the positions of the parties and the law you will apply in this case. Then we will hear the closing arguments of each party.

After that, I will explain the rules that you must follow during your deliberations in the jury room and the possible verdicts that you may return.

Please listen very carefully to everything I say. You must follow all of my instructions, including the ones that the Court gave you at the start of the case and the ones I have given during the trial, and not single out some and ignore others. They are all important.

You will have a written copy of these instructions with you in the jury room for your reference during your deliberations. You will also have a verdict form, which will list the questions that you must answer to decide this case.

¹ All jury instructions, except where noted otherwise, are adapted from those in *Sight Scis., Inc. v. Ivantis, Inc.*, 1:21-cv-01317, ECF No. 472 (Apr. 19, 2024) with non-substantive alterations related to organization and grammar.

2. Jurors' Duties

You have two main duties as jurors. The first is to decide what the facts are from the evidence that you saw and heard in court. Deciding what the facts are is your job, not mine, and nothing that I have said or done during this trial was meant to influence your decision about the facts in any way. You are the sole judges of the facts.

Your second duty is to take the law that I give you, apply it to the facts, and decide under the appropriate burden of proof which party should prevail on any given issue. It is my job to instruct you about the law, and you are bound by the oath you took at the beginning of the trial to follow the instructions that I give you, even if you personally disagree with them. This includes the instructions that I gave you before and during the trial, and these instructions. All of the instructions are important, and you should consider them together as a whole.

Perform these duties fairly. Do not guess or speculate, and do not let any bias, sympathy, or prejudice you may feel toward one side or the other influence your decision in any way.

3. Evidence Defined

You must make your decision based only on the evidence that you saw and heard here in court. Do not let rumors, suspicions, or anything else that you may have seen or heard outside of court influence your decision in any way. The evidence in this case includes only what the witnesses said while they were testifying under oath, including deposition testimony that has been played by video or read to you, the exhibits that I allowed into evidence, and any facts the parties agreed to by stipulation. During the course of the trial, you have seen many exhibits. Many of these exhibits were admitted as evidence. You will have these admitted exhibits in the jury room for your deliberations.

Certain models, reproductions, charts, summaries, and graphics have been used to illustrate certain evidence and testimony from witnesses. You may have heard these models, reproductions, charts, summaries, or the like, referred to as “demonstratives” during the trial. Unless I have specifically admitted them into evidence, these demonstratives are not themselves evidence, even if they refer to, identify, or summarize evidence. You will not have these demonstratives in the jury room. Rather, it is the underlying testimony of the witness that you heard and the exhibits cited in the demonstratives that are the evidence in this case.

Nothing else is evidence. The lawyers’ statements and arguments are not evidence. The arguments of the lawyers are offered solely as an aid to help you in your determination of the facts. Their questions and objections are not evidence. My legal rulings are not evidence. You should not be influenced by a lawyer’s objection or by my ruling on that objection. None of my comments and questions are evidence.

During the trial I may have not let you hear the answers to some of the questions that the lawyers asked. I also may have ruled that you could not see some of the exhibits that the lawyers

wanted you to see. And, sometimes I may have ordered you to disregard things that you saw or heard, or that I struck from the record. You must completely ignore all these things. Do not speculate about what a witness might have said or what an exhibit might have shown. These things are not evidence, and you are bound by your oath not to let them influence your decision in any way. Make your decision based only on the evidence, as I have defined it here, and nothing else.

4. Direct and Circumstantial Evidence

During the preliminary instructions, I told you about “direct evidence” and “circumstantial evidence.” I will now remind you what each means. Direct evidence is simply evidence like the testimony of an eyewitness which, if you believe it, directly proves a fact. If a witness testified that he saw it raining outside, and you believe him, that would be direct evidence that it was raining.

Circumstantial evidence is proof of a fact or facts from which you may infer or conclude that other facts do or do not exist. If someone walked into the courtroom wearing a raincoat covered with drops of water and carrying a wet umbrella, that would be circumstantial evidence from which you could conclude that it was raining.

It is your job to decide how much weight to give the direct and circumstantial evidence. The law makes no distinction between the weight that you should give to either one, nor does it say that one is any better evidence than the other. You should consider all the evidence, both direct and circumstantial, and give it whatever weight you believe it deserves.

5. Consideration of Evidence

You should use your common sense in weighing the evidence. Consider it in light of your everyday experience with people and events, and give it whatever weight you believe it deserves. If your experience tells you that certain evidence reasonably leads to a conclusion, you are free to reach that conclusion.

6. Statements of Counsel

A further word about statements of counsel and arguments of counsel. The attorneys' statements and arguments are not evidence. Instead, their statements and arguments are intended to help you review the evidence presented.

If you remember the evidence differently from the way it was described by the attorneys, you should rely on your own recollection.

7. Credibility of Witnesses

You are the sole judges of each witness's credibility. You may believe everything a witness says, or part of it, or none of it. In deciding what to believe, you may consider a number of factors, including each witness's means of knowledge; strength of memory; opportunity to observe; how reasonable or unreasonable the testimony is; whether it is consistent or inconsistent; whether it has been contradicted; the witness's motives, biases, prejudices, or interests; the witness's manner or demeanor on the witness stand; and any other factors that, according to the evidence, could affect the credibility of the testimony.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there is evidence tending to prove that the witness testified falsely about some important fact or whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony he or she gave at the trial in person or by deposition testimony played by video or read to you. You have the right to distrust such witness's testimony and you may reject all or some of the testimony of that witness or give it such credibility as you may think it deserves.

One more point about the witnesses. Sometimes jurors wonder if the number of witnesses who testified makes any difference. Do not make any decisions based only on the number of witnesses who testified. What is more important is how believable the witnesses were, and how much weight you think their testimony deserves.

8. Expert Witnesses

Expert testimony is testimony from a person who has a special skill or knowledge in some science, profession, or business. This skill or knowledge is not common to the average person but has been acquired by the expert through special study or experience. In weighing expert testimony, you may consider the expert's qualifications, the reasons for the expert's opinions, and the reliability of the information supporting the expert's opinions, as well as the factors I have previously mentioned for weighing testimony of any other witness. Expert testimony should receive whatever weight and credit you think appropriate, given all the other evidence in the case. You are free to accept or reject the testimony of experts, just as with any other witness.

9. Deposition Testimony

During the trial, certain testimony was presented to you by the playing of video excerpts or read into evidence from a deposition. The testimony may have been edited or cut to exclude irrelevant testimony as the parties have only a limited amount of time to present you with evidence. You should not attribute any significance to the fact that the testimony may appear to have been edited.

Deposition testimony that is given under oath is entitled to the same consideration you would give it had the witnesses personally appeared in court.

10. Use of Notes

You may use notes taken during the trial to assist your memory. Remember that your notes are for your personal use. They may not be given or read to anyone else. Do not use your notes, or any other juror's notes, as authority to persuade fellow jurors. Your notes are not evidence, and they are by no means a complete outline of the proceedings or a list of the highlights of the trial. Some testimony that is considered unimportant at the time presented and, thus, not written down, may take on greater importance later in the trial considering all the evidence presented. Your notes are valuable only to refresh your memory. Your memory is what you should be relying on when it comes time to deliberate and render your verdict in this case.

11. Burdens of Proof

In any legal action, facts must be proven by a required standard of evidence, known as the “burden of proof.” In a patent case such as this, there are two different burdens of proof that are used. The first is called “preponderance of the evidence.” The second is called “clear and convincing evidence.” I told you about these two standards of proof during my preliminary instructions to you and I will now remind you what they mean.

Plaintiff asserts that Defendants infringe the '903 Patent. Plaintiff also asserts that Defendants' infringement is willful. Plaintiff has the burden of proving infringement and willfulness by a “preponderance of the evidence.” That means Plaintiff has to prove to you, in light of all the evidence, that what it claims is more likely true than not. To say it differently, if you were to put the evidence of Plaintiff and the evidence of Defendants on opposite sides of a scale, the evidence supporting Plaintiff's claims would have to make the scales tip somewhat on its side in each instance. If the scale should remain equal or tip somewhat in favor of Defendants, you must find in favor of Defendants.

Defendants deny Plaintiff's allegations and further contend that certain asserted claims of the '903 Patent are invalid or were not infringed because they were [CosmoKey's Proposal]:² in

² CosmoKey: CosmoKey's Proposal provides clarification as to when the prior commercial use defense may apply. Absent this clarification, the jury may be confused as to when the prior commercial use defense begins.

prior commercial use at least one year before the priority date of the '903 Patent (i.e. by October 31, 2010). [Defendants' Proposal]:³ in prior commercial use.

Parties challenging the validity of a patent or asserting the claims were in prior commercial use—in this instance, Defendants—have the burden to prove that by “clear and convincing evidence.” Clear and convincing evidence means evidence that it is highly probable that a fact is true. Clear and convincing evidence involves a higher degree of persuasion than is necessary to meet the preponderance of the evidence standard. [CosmoKey's Proposal]:⁴⁵ Absent clear and convincing evidence otherwise, you should find that the patent has not been proven invalid.

³ Defendants: CosmoKey's Proposal is unnecessary and confusing to the jury. This instruction is meant to introduce the general arguments of the parties, with additional detail being provided by later instructions. Furthermore, the phrase “at least one year before the priority date of the '903 Patent (i.e. by October 31, 2010)” is ambiguous. This could be interpreted as requiring prior commercial use one year before October 31, 2009, or prior commercial use by October 31, 2010. Therefore this instruction runs a significant risk of confusing the jury as to the relevant date.

⁴ CosmoKey: CosmoKey's Proposal clarifies that a patent is presumed valid. Defendants' Proposal to remove this addition may lead to confusion and uncertainty for the jury.

⁵ Defendants: This instruction puts a thumb on the scale in favor of CosmoKey by unnecessarily restating the burden of proof standard in a way that favors invalidity. The “clear and convincing evidence” standard is required due to the presumption of validity, so additional statements about the presumption of validity are not required.

You may have heard of the “beyond a reasonable doubt” burden of proof from criminal cases. That requirement is the highest burden of proof. It does not apply to civil cases like this one and, therefore, you should put it out of your mind.

II. THE PARTIES AND THEIR CONTENTIONS

I will now review for you the parties in this action, and the positions of the parties that you will have to consider in reaching your verdict.

As I have previously told you, the plaintiff in this case is CosmoKey. The defendants in this case are Cisco and Duo, which you have heard as collectively referred to as “Defendants.”

In this case, Plaintiff alleges that Defendants infringe claims 1–3, 5, and 8–12 of the ’903 patent. The claims may be referred to as the “Asserted Claims.” You may have also heard the ’903 patent referred to as the “Asserted Patent” and “the Patent.”

Plaintiff also contends Defendants’ infringement was willful.

1. Defendants denies that it has infringed the Asserted Claims of the ’903 Patent and contends that the asserted claims are invalid or were not infringed because they were [CosmoKey’s Proposal]:⁶ in prior commercial use at least one year before the priority date of the ’903 Patent. [Defendant’s Proposal]:⁷ in prior commercial use. Invalidity and prior commercial use are defenses to infringement.

⁶ CosmoKey: CosmoKey’s Proposal provides clarification as to when the prior commercial use defense may apply to prevent jury confusion as to this issue.

⁷ Defendants: CosmoKey’s Proposal is unnecessary and confusing to the jury. This instruction is meant to introduce the general arguments of the parties, with additional detail being provided by later instructions.

III. CLAIM CONSTRUCTION

1. Claim Construction Generally

Before you decide infringement and invalidity, you will have to understand the patent claims. The patent claims are numbered sentences at the end of the patent.

The claims are intended to define, in words, the boundaries of the inventor's rights. Only the claims of the patent can be infringed. Neither the written description, nor the drawings of a patent can be infringed. Each of the claims must be considered individually. You must use the same claim meaning for both your decision on infringement and your decision on invalidity.

2. Claim Construction for the Case

It is my job as judge to provide to you the meaning of any claim language that must be interpreted. You must accept the meanings I give you and use them when you decide whether any claim has been infringed and whether any claim is invalid. Those meanings have been provided to you in a chart in your notebooks.

IV. INFRINGEMENT

I will now instruct you as to the law you must follow when deciding whether Plaintiff has proven that Defendants infringed any of the Asserted Claims.

Patent law gives the owner of a valid patent the right to exclude others from importing, making, using, offering to sell, or selling the claimed invention within the United States during the term of the patent. Any person or business entity that has engaged in any of those acts without the patent owner's permission infringes the patent.

[CosmoKey's Proposal]:⁸

Here, Plaintiff alleges that Defendants' Duo Push product and other products that are used to provide or are used with Duo Push infringe the asserted claims. These other products include Duo Push, Traditional Duo Prompt, Duo Universal Prompt, Duo Passwordless, Verified Duo Push, Duo Free, Duo MFA, Duo Access, Duo Beyond, Duo Federal, Duo Web, Duo Central, Duo Single Sign-on, the Duo Mobile App, Cisco SecureX platform, Cisco Secure Access, Cisco Umbrella, Cisco Secure Client, and Cisco Identity Services Engine. These other products may have features that are not included in Duo Push. You are not to compare those other features to

⁸ CosmoKey: CosmoKey's Proposal is adapted from this Court's instruction in *Sight Scis., Inc. v. Ivantis, Inc.*, 21-cv-01317, ECF No. 488 at 21 (D. Del. Apr. 26, 2024). Defendants' Proposal fails to inform the jury that having one's own patent is not a defense to infringing another's patent and may lead to confusion among the jury. Defendants' instructions omitting the product name will likely confuse the jury because these products—described with Defendants' own nomenclature—are those that Defendants use to provide Duo Push. These products are, as such, relevant to infringement.

the Accused Products as part of your determination of whether the Accused Products infringe the Asserted Claims. I will collectively refer to Duo Push and these other products as the Accused Products.

Having one's own patent is not a defense to infringing another's patent. Accordingly, whether Defendants have patents and whether any of these patents cover the Accused Products should not be considered in your determination of whether the Accused Products infringe Plaintiff's asserted '903 Patent.

[Defendants' Proposal]:⁹ The relevant comparison for purposes of infringement is the Accused Methods to the Asserted Claims. You may have seen other products during the course of the trial besides the Accused Products. You are not to compare those other products to the Accused Products as part of your determination of whether the Accused Products infringe the Asserted Claims.

⁹ Defendants: Plaintiff's instruction is unnecessary and confusing to the jury. There has been no indication that Plaintiff intends to make arguments about Duo's specific additional products beyond Duo Push. Mentioning these additional products will only serve to confuse the jury about the relevant Accused Products. In addition, Plaintiff's instruction that "[h]aving one's own patent is not a defense to infringing another's patent" is unnecessary. Defendants will not argue to the jury that Defendants do not infringe because they have patents on their products. Therefore, including this instruction will confuse the jury and put a thumb on the scale for Plaintiff.

Infringement is assessed on a claim-by-claim basis. Therefore, there may be infringement of one claim but no infringement of another.¹⁰

A claim of a patent may be infringed directly or indirectly. I will now explain direct and indirect infringement.

¹⁰ *Northwestern Univ. v. Universal Robots A/S*, 1:21-cv-00149, D.I. 369 (Sept. 19, 2024).

3. Direct Infringement—Literal Infringement

[CosmoKey's Proposal]:¹¹¹²

In this case, Plaintiff asserts that Defendants have directly infringed the Asserted Claims of the '903 Patent. Defendants are liable for directly infringing a claim if you find that Plaintiff has proven that it is more likely than not that Defendants made, used, imported, offered to sell, or sold the invention defined in that claim of Plaintiff's asserted '903 Patent during the term of the patent.

To determine direct infringement, you must compare the Accused [CosmoKey's Proposal]:¹³ Product [Defendants' Proposal]: Method with each patent claim Plaintiff asserts is

¹¹ CosmoKey: CosmoKey's Proposal is adapted from this Court's instruction in *Sight Scis., Inc. v. Ivantis, Inc.*, 21-cv-01317, ECF No. 488 at 21 (D. Del. Apr. 26, 2024). Defendants' Proposal fails to provide the jury with necessary context relating to the allegations in this case.

¹² Defendants: This additional language unfairly and unnecessarily puts the thumb on the scale for Plaintiff. The earlier instructions already summarize each party's contentions, and there is no need to continuously repeat what Plaintiff's assertions are. Instead, these instructions should be limited to educating the jury about how to apply the law to the facts

¹³ CosmoKey: CosmoKey's Proposal clarifies that the items accused are the accused products that incorporate Duo Push. Referring to these products as "methods" is likely to confuse the jury given Defendants description of their products. This description also conflicts with other instructions and submissions in this case. This clarification is applicable to all instances where CosmoKey proposes referring to the infringing products as "Accused Product(s)."

infringed. You must determine infringement separately for each patent claim that Plaintiff asserts is infringed.

A patent claim is directly infringed by literal infringement only if the Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method includes each and every method step recited in that patent claim. Thus, in this case, if the Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method does not contain one or more steps recited in a claim, Defendants do not infringe that claim.

Direct infringement occurs where all steps of a claimed method are performed by a single party or are attributable to a single party.

[Defendants' Proposal]:¹⁴¹⁵ Where more than one party is involved in practicing the steps, you must determine whether the acts of one are attributable to the other such that a single party is responsible for the infringement. In that scenario, the single party is responsible for the

¹⁴ Defendants: Defendants' Proposal is adapted from the *Federal Circuit Bar Association Model Patent Jury Instructions*, https://s45968.pcdn.co/wp-content/uploads/public_docs/May-2020-FCBA-Model-Patent-Jury-Instructions.pdf. By contrast, none of the authority cited by CosmoKey justifies the separation of direct and joint infringement into separate instructions. This separation is likely to confuse the jury because it suggests that direct and joint infringement may be separate theories on which to find infringement.

¹⁵ CosmoKey: CosmoKey's proposal to separate direct and joint infringement is for organizational purposes. The content of CosmoKey's joint infringement instruction makes it clear that joint infringement is not a separate theory than direct infringement.

infringement if that single party directs or controls another party's performance of the claim steps.

To prove that Duo directed or controlled another party's performance of the claim steps, CosmoKey must prove by a preponderance of the evidence (1) that the other party performed the claim steps in order to receive a benefit from Duo and (2) that Duo established how or when the other party performed the claim steps.

A party can directly infringe a patent claim without knowing of the patent or without knowing that what the party is doing is patent infringement.

[CosmoKey's Proposal]:¹⁶

¹⁶ CosmoKey's Proposal is adapted from this Court's instruction in *Sight Scis., Inc. v. Ivantis, Inc.*, 1:21-cv-01317, ECF No. 472 (Apr. 19, 2024), and also incorporate instructions from *3G Licensing, S.A. v. HTC Corp.*, No. 17-cv-83 (D. Del. Oct. 16, 2023), the Northern District of California's Model Patent Jury Instructions, and the Ninth Circuit Court of Appeal's Manual of Model Civil Jury Instructions. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf; *Manual of Model Civil Jury Instructions* § 17.20 (June 2019), <https://www.ce9.uscourts.gov/jury-instructions/node/277>. CosmoKey's proposal to separate direct and joint infringement is for organizational purposes. The content of CosmoKey's joint infringement instruction makes clear that joint infringement is not a separate theory from direct infringement. Defendants' joint infringement instructions, in contrast, fail to outline the

4. Joint Infringement

Here, in addition to alleging that Cisco and Duo each infringe the asserted claims of the Asserted Patents, Plaintiff also alleges that Defendants jointly infringe the asserted claims of the Asserted Patents through the actions of their customers and users.

Direct infringement occurs where all steps of a claimed method are performed by or are attributable to a single party. Where more than one party is involved in practicing the steps, you must determine whether the acts of one are attributable to the other such that a single party is responsible for the infringement. Therefore, there may be direct infringement where more than one party performs every step of the process. For instance, where one actor directs or controls the other actor's performance of the claim steps or the steps performed by one actor are attributable to another actor.

There are two ways Plaintiff can prove that Defendants direct or control another actor's—here, Defendants' customers and users—performance of the claim steps.

First, Plaintiff may prove that Defendants instructed their customers and users to perform the claim steps, by proving, by a preponderance of the evidence, that Defendants' customers and users performed the claim steps to receive a benefit from Defendants and that Defendants established how or when the claim steps were performed.

Second, Plaintiff may prove that Defendants instructed their customers and users to perform the claim steps, by proving each of the following elements by a preponderance of the evidence:

preponderance of the evidence burden on CosmoKey to prove joint infringement and fails to inform the jury of the elements required for CosmoKey to prove joint infringement.

1. Defendants directly benefitted financially from the infringing activity of its customers or users;

2. Defendants had the right and ability to control the infringing activity of its customers or users; and

3. Defendants failed to exercise that right and ability.

If you find that Plaintiff has proved each of these elements, your verdict should be for Plaintiff if you also find that Defendants' customers infringed the '903 Patent.

Cisco also can be liable for infringement if it acted through Duo as its agent to perform an infringing act or contracted with another to perform an infringing act. An agent is an entity that performs services for another entity under an express or implied agreement and who is subject to the other's control or right to control the manner and means of performing the services. The other entity is called a principal. An agent is acting within the scope of authority if the agent is engaged in the performance of duties which were expressly or impliedly assigned to the agent by the principal.

5. Infringement of Independent and Dependent Claims

There are two different types of claims in the patent. One type is called an independent claim. The other is called a dependent claim.

An independent claim does not refer to any other claim of the patent. For example, Claim 1 of the '903 Patent, is an independent claim. An independent claim must be read separately from the other claims to determine the scope of the claim. To establish literal infringement of an independent claim, Plaintiff must show that it is more likely than not that the Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method includes all steps of the independent claim.

A dependent claim refers to at least one other claim in the patent. For example, Claim 2 of the '903 Patent is a dependent claim that refers to Claim 1 of the '903 Patent. A dependent claim includes all elements recited in the dependent claim, as well as all elements of the independent claim to which it refers. To establish literal infringement of a dependent claim, Plaintiff must show that it is more likely than not that the Accused **[CosmoKey's Proposal]: Product [Defendants' Proposal]: Method** includes all steps of the independent claim and all steps of the dependent claim.

If you find that an independent claim from which a dependent claim depends is not literally infringed, then you must find that the dependent claim is also not literally infringed.

6. Infringement of “Comprising” Claims

The preambles to the Asserted Claims use the word “comprising.” The word “comprising” means “including the following but not excluding others.”

If you find that the Accused [CosmoKey’s Proposal]: Product [Defendants’ Proposal]: Method includes all the steps in one of the Asserted Claims, even if the Accused [CosmoKey’s Proposal]: Product [Defendants’ Proposal]: Method includes additional steps, you must find that the Accused [CosmoKey’s Proposal]: Product [Defendants’ Proposal]: Method literally infringes that claim.

7. Infringement Under the Doctrine of Equivalents

If you decide that the Accused [CosmoKey's Proposal]: Products [Defendants' Proposal]: Methods do not literally infringe an asserted claim of the '903 Patent, you must then decide whether the Accused [CosmoKey's Proposal]: Products [Defendants' Proposal]: Methods infringe the asserted claim under what is called the "doctrine of equivalents."

Under the doctrine of equivalents, the Accused [CosmoKey's Proposal]: Products [Defendants' Proposal]: Methods infringe an asserted patent claim if the Accused [CosmoKey's Proposal]: Products [Defendants' Proposal]: Methods include steps that are identical or equivalent to the requirements of the claim. If the Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method is missing even one requirement of the asserted patent claim, the claim is not infringed under the doctrine of equivalents. Thus, in making your decision under the doctrine of equivalents, you must look at each individual requirement of the asserted patent claim and decide whether the Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method practice either an identical or equivalent step to that individual claim requirement.

A step is equivalent to a requirement of an asserted claim if a person of ordinary skill in the field would think that the differences between the step and the requirement were not substantial as of the time of the alleged infringement. I will provide you with the definition for a person of ordinary skill in the field.

Changes in technique or improvements made possible by technology developed after the patent application is filed may still be equivalent for the purposes of the doctrine of equivalents if it still meets the other requirements of the doctrine of equivalents set forth in this instruction.

One way to decide whether any difference between a requirement of an asserted claim and a step of the [CosmoKey's Proposal]: product [Defendants' Proposal]: method is not

substantial is to consider whether, as of the time of the alleged infringement, the step of the [CosmoKey's Proposal]: product [Defendants' Proposal]: method performed substantially the same function, in substantially the same way, to achieve substantially the same result as the requirement in the patent claim.

In deciding whether any difference between a claim requirement and an Accused [CosmoKey's Proposal]: Product [Defendants' Proposal]: Method is not substantial, you may consider whether, at the time of the alleged infringement, persons of ordinary skill in the field would have known of the interchangeability of the step with the claimed requirement. The known interchangeability between the claim requirement and the step of the Accused [CosmoKey's Proposal]: Products [Defendants' Proposal]: Methods is not necessary to find infringement under the doctrine of equivalents. However, known interchangeability may support a conclusion that the difference between the step in the [CosmoKey's Proposal]: product [Defendants' Proposal]: method and the claim requirement is not substantial.

The fact that a step of the [CosmoKey's Proposal]: product [Defendants' Proposal]: method performs the same function as the claim requirement is not, by itself, sufficient to show known interchangeability.

8. Inducing Patent Infringement¹⁷

[CosmoKey's Proposal]:¹⁸

Plaintiff also argues that Defendants have actively induced another to infringe the '903 Patent. In order for the Defendants to have induced infringement, they must have induced another to directly infringe a claim of the '903 Patent; if there is no direct infringement by anyone, there can be no induced infringement. As with direct infringement, you must determine induced infringement on a claim-by-claim basis.

In order to be liable for inducing infringement, Defendants must:

1. Have intentionally taken action that actually induced direct infringement;
2. Have been aware of the '903 Patent; and

¹⁷ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

¹⁸ CosmoKey: CosmoKey's Proposal is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

This Proposal provides a clear and straightforward standard. The structure of Defendants' Proposal, along with its repeated emphasis on the customer's behavior, is likely to confuse a jury.

3. Have known that the acts it was causing would infringe the patent.

Defendants may be considered to have known that the acts it was causing would infringe the '903 Patent if willfully blinded itself to the infringing nature of the direct infringer's acts.

[Defendants' Proposal]:¹⁹

In order for Duo to have induced infringement, Plaintiff must prove by a preponderance of the evidence that (1) a single actor is responsible for direct infringement, namely, a single actor performs all of the steps of the method recited in an asserted claim, and (2) Duo actively induced the act of infringement by that single actor. If there is no direct infringement by anyone, there can be no induced infringement.

As with direct infringement, you must determine induced infringement on a claim-by-claim basis.

In order to be liable for inducing infringement, Plaintiff must establish that it is more likely than not that:

1. A single actor has directly infringed an asserted claim;
2. Duo has intentionally taken action that actually induced that direct infringement;
3. Duo has been aware of the '903 patent;
4. Duo has known that the acts it was causing would infringe the patent.

¹⁹ Defendants: Defendants' Proposal adapts the instructions taken from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

Plaintiff must prove all four elements to establish infringement. In order to establish active inducement of infringement, it is not sufficient that Duo directly infringe a claim. Nor is it sufficient that Duo was aware of the acts of another actor that allegedly constitute the direct infringement. Rather, in order to find active inducement of infringement, you must find either that Duo specifically intended another actor to infringe an asserted claim. The mere fact, if true, that Duo knew or should have known that there was a substantial risk that another actor's action would infringe an asserted claim would not be sufficient to support a finding of active inducement of infringement.

9. Contributory Infringement²⁰

[Plaintiff's Proposal]:²¹²² Plaintiff also argues that Defendants have contributed to infringement by another. Contributory infringement may arise when someone supplies something that is used to infringe one or more of the patent claims. As with direct infringement, you must determine contributory infringement on a claim-by-claim basis.

In order for there to be contributory infringement by Defendants, someone other than Defendants must directly infringe a claim of the '903 Patent; if there is no direct infringement by anyone, there can be no contributory infringement.

If you find someone has directly infringed the '903 Patent, then contributory infringement exists if:

²⁰ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

²¹ CosmoKey: CosmoKey's Proposal provides relevant context and framing for the issue of contributory infringement. Informing the jury of CosmoKey's claims does not "unfairly and unnecessarily put[] the thumb on the scale for Plaintiff."

²² Defendants: This additional language unfairly and unnecessarily puts the thumb on the scale for Plaintiff. The earlier instructions already summarize each party's contentions, and there is no need to continuously repeat what Plaintiff's assertions are. Instead, these instructions should be limited to educating the jury about how to apply the law to the facts

1. Defendants supplied an important component of the infringing part of the [CosmoKey's Proposal]: product [Defendants' Proposal]: method;
2. The component is not a common component suitable for non-infringing use; and
3. Defendants supplied the component with the knowledge of the '903 Patent and knowledge that the component was especially made or adapted for use in an infringing manner.

A "common component suitable for non-infringing use" is a component that has uses other than in the patented [CosmoKey's Proposal]: product [Defendants' Proposal]: method, and those other uses are not occasional, farfetched, impractical, experimental, or hypothetical.

Defendants may be considered to have known that the component was especially made or adapted for use in an infringing product, if Defendants willfully blinded themselves of the patent and to the infringing nature of the direct infringer's acts.

10. Prior Commercial Use Defense to Infringement²³

I will now instruct you on the rules you must follow in determining whether Defendants have proven the prior commercial use defense.

To prove the prior commercial use defense, Defendants must show by clear and convincing evidence that they commercially used the product accused of infringement in good faith in the United States at least one year before October 31, 2011. This defense is referred to as the prior commercial use defense.

[CosmoKey's Proposal]:²⁴ The prior commercial use defense is a personal defense. This means that this defense does not transfer to a party that later acquires the entity that was commercially using the accused product in good faith in the United States at least one year before October 31, 2011. If you find that one Defendant has shown by clear and convincing evidence that it is entitled

²³ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

²⁴ CosmoKey: CosmoKey's instruction clarifies that the commercial use defense is a personal defense limited to one party. Defendants' omission of this instruction is likely to confuse the jury. Defendants' instruction relating to an "internal commercial use" or "an actual arm's length sale" likely to confuse the jury by additional requirements that are not required by law.

to this defense, you must still separately determine whether the other Defendant is entitled to the defense.

[Defendants' Proposal]:²⁵ A commercial use can be an internal commercial use or an actual arm's length sale or other arm's length commercial transfer of the method accused of infringement.

This defense does not invalidate a patent but prevents Plaintiff from enforcing the '903 patent against Defendants.

²⁵ This instruction is directed adapted from the statutory language of 35 U.S.C. § 273(a). CosmoKey's Proposal does not instruct the jury on the definition of "commercial use" and risks confusing the jury.

V. INVALIDITY

Defendants contend that the Asserted Claims of the Asserted Patent are invalid.

Defendants must prove invalidity by clear and convincing evidence. [CosmoKey's Proposal]:²⁶

Otherwise, the Asserted Patent is presumed valid.

²⁶ CosmoKey: CosmoKey's proposal clarifies for the jury that a patent is entitled to a presumption of validity. Defendants' omission of this instruction is likely to confuse the jury.

1. Prior Art

Under the patent laws, in order for someone to be entitled to a patent, the invention must actually be novel and not obvious over what came before it, which is referred to as “prior art.”²⁷

Prior art includes any of the following items received into evidence during trial:

1. Any product or method that was publicly known or used by others in the United States before invention by the inventor;
2. Any product or method that was in public use or on sale in the United States before October 31, 2011;
3. Any patents that issued before October 31, 2011 or patent applications that published before invention by the inventor;
4. Any published application for patent by another filed in the United States before invention by the inventor;
5. A patent granted on an application for patent by another filed in the United States before invention by the inventor;
6. Any publications having a date of public accessibility before invention by the inventor; and
7. Any product or method that was made by anyone in the United States before invention where the claimed invention was not later abandoned, suppressed, or concealed.

²⁷ *Nippon Shinyaku Co., Ltd., v. Sarepta Therapeutics, Inc.*, 1:21-cv-01015, ECF No. 695 (Dec. 19, 2024).

2. Prior Art Considered or Not Considered by the Patent Office

Regardless of whether or not particular prior art references were considered by the Patent Examiner during the prosecution of the application that issued as the Asserted Patent, Defendants must prove invalidity by clear and convincing evidence. This burden of proof remains the same whether or not the Patent Examiner considered the references.

Where Defendants are relying on prior art that was not considered by the Patent Examiner, you may consider whether that prior art is significantly different and more relevant than the prior art that the Patent Examiner did consider. If you decide it is different and more relevant, you may weigh that prior art more heavily when considering whether Defendants have carried their clear-and-convincing burden of proving invalidity.

3. Perspective of One of Ordinary Skill in the Art²⁸

Questions of invalidity and infringement are determined from the perspective of a person of ordinary skill in the art in the field of the asserted invention as of October 31, 2011.

[CosmoKey's Proposal]:²⁹ A person of ordinary skill in the art of the '903 Patent would have a bachelor's degree in computer science, computer engineering, electrical engineering, or a related field, and either (1) two or more years of industry experience in the field of network communications or network security, or (2) an advanced degree in computer science, computer engineering, electrical engineering, or a related field.

[Defendants' Proposal]: Plaintiff and Defendants agree that the level of ordinary skill in the field was someone who would have had a working knowledge of the authentication art that is pertinent to the '903 Patent, including two-factor authentication using a mobile device. A person of ordinary skill in the art would have had a bachelor's degree in computer science, computer engineering, or an equivalent, and three years of professional experience. Lack of professional experience can be remedied by additional education, and vice versa.

²⁸ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

²⁹ CosmoKey: CosmoKey's Proposal aligns with the person of ordinary skill standard advocated by CosmoKey during the expert discovery phase. Defendants' Proposal differs from the standard that either expert used as the basis for their opinions.

4. Anticipation³⁰

A patent claim is invalid if the claimed invention is not new. For the claim to be invalid because it is not new, all of its requirements must have existed in a single device or method that predates the claimed invention, or must have been described in a single previous publication or patent that predates the claimed invention. If a patent claim is not new we say it is “anticipated” by a prior art reference.

Anticipation must be determined on a claim-by-claim basis. For a claim to be anticipated, Defendants must prove that a single piece of prior art includes every single element or limitation of a claim, arranged or combined in the same way as recited in the claim. The description in the written reference does not have to be in the same words as the claim, but all the requirements of the claim must be there, either stated or necessarily implied, so that someone of ordinary skill in the field looking at that one reference would be able to make and use the claimed invention. In other words, if any element or step of the patent is not present in the prior art, the patent is not anticipated and it is valid.

³⁰ This instruction is adapted from the Northern District of California’s Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

5. Obviousness³¹

[CosmoKey's Proposal]:³²

Not all innovations are patentable. A patent claim is invalid if the claimed invention would have been obvious to a person of ordinary skill in the field as of October 31, 2011. This means that even if all the requirements of the claim cannot be found in a single prior art reference that would anticipate the claim or constitute a statutory bar to that claim, a person of ordinary skill in the field who knew about all this prior art would have come up with the claimed invention.

³¹ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

³² CosmoKey: CosmoKey's Proposal is adapted from the Northern District of California's Model Patent Jury Instructions. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf. CosmoKey's Proposal includes the objective indicia of nonobviousness in its list. Defendants' Proposal separates these from the factors that the jury must consider as part of determining obviousness. This is likely to confuse the jury as objective indicia of nonobviousness must be considered along with the other factors.

The ultimate conclusion of whether a claim is obvious should be based upon your determination of several factual questions.

First, you must decide the scope and content of the prior art. In order to be considered as prior art, these references must be reasonably related to the claimed invention of that patent. A reference is reasonably related if it is in the same field as the claimed invention or is from another field to which a person of ordinary skill in the field would look to solve a known problem.

Second, you must decide what difference, if any, existed between the claimed invention and the prior art.

Finally, you should consider any of the following factors that you find have been shown by the evidence:

1. Commercial success of a product due to the merits of the claimed invention;
2. A long felt need for the solution provided by the claimed invention;
3. Unsuccessful attempts by others to find the solution provided by the claimed invention;
4. Copying of the claimed invention by others;
5. Unexpected and superior results from the claimed invention;
6. Acceptance by others of the claimed invention as shown by praise from others in the field or from the licensing of the claimed invention;
7. Other evidence tending to show non-obviousness;
8. Independent invention of the claimed invention by others before or at about the same time as the named inventor thought of it; and
9. Other evidence tending to show obviousness.

The presence of any of the list factors 1–7 as appropriate may be considered by you as an indication that the claimed invention would not have been obvious as of the effective filing date of the claimed invention, and the presence of list factors 8–10 may be considered by you as an indication that the claimed invention would have been obvious at such time. Although you should consider any evidence of these factors, the relevance and importance of any of them to your decision on whether the claimed invention would have been obvious is up to you.

A patent claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was independently known in the prior art. In evaluating whether such a claim would have been obvious, you may consider whether Defendants have identified a reason that would have prompted a person of ordinary skill in the field to combine the elements or concepts from the prior art in the same way as in the claimed invention. There is no single way to define the line between true inventiveness on the one hand (which is patentable) and the application of common sense and ordinary skill to solve a problem on the other hand (which is not patentable). For example, market forces or other design incentives may be what produced a change, rather than true inventiveness. You may consider whether an inventor would look to the prior art to help solve the particular problem at hand. You may consider whether the change was merely the predictable result of using prior art elements according to their known functions, or whether it was the result of true inventiveness. You may also consider whether there is some teaching or suggestion in the prior art to make the modification or combination of elements claimed in the patent. Also, you may consider whether the innovation applies a known technique that had been used to improve a similar device or method in a similar way. You may also consider whether the claimed invention would have been obvious to try, meaning that the claimed innovation was one of a relatively small number of possible approaches to the problem

with a reasonable expectation of success by those skilled in the art. However, you must be careful not to determine obviousness using the benefit of hindsight; many true inventions might seem obvious after the fact. You should put yourself in the position of a person of ordinary skill in the field as of October 31, 2011 and you should not consider what is known today or what is learned from the teaching of the patent.

[Defendants' Proposal]:³³

As I explained previously, under the patent laws a person is granted a patent only if the invention claimed in the patent is both new and not obvious in light of what came before. Even though an invention has not been identically disclosed or described before it was made by an inventor, to be patentable, the invention must also not have been obvious to a person of ordinary skill in the art at the time the invention was made. Obviousness may be proven by considering more than one item of prior art. In this case, Duo contends that all the asserted claims of the Asserted Patent are obvious over specific combinations of the prior art and the knowledge of a person of skill in the art.

The issue is not whether the asserted claims would have been obvious to you as a layperson, to me as the judge, or to a genius in the relevant field, but whether it would have been obvious to one of ordinary skill in the art at the time the invention was made. In determining whether an

³³ Defendants: This instruction is adapted from *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH, D.I. 314 (D. Del. Dec. 15, 2023). Defendants understand that CosmoKey prefers an obviousness instruction from the N.D. Cal. model instructions over one that this Court has given to a jury in at least one instance. CosmoKey, however, does not explain why this Court's prior instruction was wrong in any regard.

asserted claim would have been obvious, you must avoid using hindsight; that is, you should not consider what is known today or what was learned from the teachings of the asserted patents. You should not use the patent as a road map for selecting and combining items of prior art. You must put yourself in the place of a person of ordinary skill in the art at the time the invention was made. In determining whether an asserted claim would have been obvious, you must consider (1) the scope and content of the prior art; (2) the differences, if any, between the claimed invention and the prior art; (3) the level of ordinary skill in the art as of October 31, 2011; and (4) additional considerations, if any, that indicated that the invention was obvious or not obvious.

To determine the scope and content of the prior art, you must determine what prior art is reasonably pertinent to the particular problems the inventors faced. The person of ordinary skill in the art is presumed to be aware of all the pertinent prior art. I have already instructed you on how you are to determine the level of ordinary skill in the art. Once you have made that determination, you are to apply it in your determination of whether the asserted claims would have been obvious. The next factor that you must consider is the differences between the prior art and the asserted claims.

Importantly, a claim is not proved obvious merely by demonstrating that each of the claim requirements was independently known in the prior art. Most, if not all, inventions rely on building blocks of prior art, and claimed discoveries almost of necessity will likely be combinations of what is already known. Therefore, you should consider whether a reason existed at the time of the invention that would have prompted a person of ordinary skill in the art to combine the known elements in the way the asserted claims do. The reason could come from the prior art, the background knowledge of one of ordinary skill in the art, the nature of any problem or need to be addressed, market demand, or common sense. If you find that a reason existed at the time of the

invention to combine the elements of the prior art to arrive at the claimed invention, and there would have been a reasonable expectation of success for doing so, this evidence would make it more likely that the claimed invention was obvious.

In arriving at your decision on the issue of whether the asserted claims would have been obvious to a person of ordinary skill in the art, you may consider such factors as:

1. Whether the asserted claims were merely the predictable result of using prior art elements according to their known functions;
2. Whether the asserted claims provide an obvious solution to a known problem in the relevant field;
3. Whether the prior art teaches or suggests the desirability of combining elements in the asserted claims;
4. Whether the prior art teaches away from combining elements in the asserted claims; and
5. Whether it would have been obvious to try the combinations of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions.

In arriving at your decision on the issue of whether the asserted claims would have been obvious to a person of ordinary skill in the art, you should consider any “objective indicia of nonobviousness,” that may have existed at the time of the invention and afterwards that suggest that the asserted claims were not obvious. Such objective indicia may include the presence of a long-felt but unresolved need in the industry, a failure to address a known problem, and the commercial success of the claimed invention. These factors should be considered along with all the other evidence in the case in determining whether the asserted claims would have been obvious.

In considering this kind of evidence, you should consider whether the secondary consideration was attributable to the features of the asserted claims as opposed to features already found in the prior art.

6. Written Description³⁴

Patent law contains certain requirements for the part of the patent called the specification. One requirement for the specification is the written description requirement. Defendants contend that the Asserted Claims are invalid for the additional reason that the specification of the Asserted Patent does not contain an adequate written description of the invention. [CosmoKey's Proposal]:³⁵³⁶ Defendants bear the burden of establishing by clear and convincing evidence that the specification fails to satisfy the written description requirement.

A patent must contain a written description of the method claimed in the patent. The written description requirement helps ensure that the patent applicant actually invented the claimed subject matter. To satisfy the written description requirement, the patent specification must describe each and every limitation of a patent claim, in sufficient detail, although the exact words

³⁴ This instruction is adapted from this Court's instruction in *Sight Scis., Inc. v. Ivantis, Inc.*, 1:21-cv-01317, ECF No. 472 (Apr. 19, 2024), *Northwestern Univ. v. Universal Robots A/S*, 1:21-cv-00149, ECF No. 369 (Sept. 19, 2024), and *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH, ECF 314 (D. Del. Dec. 15, 2023).

³⁵ CosmoKey: CosmoKey's Proposal provides relevant context and framing for the written description issue. Informing the jury of the standard that Defendants must meet in order to prove invalidity does not "unfairly and unnecessarily put the thumb on the scale."

³⁶ Defendants: The jury has already been instructed that the clear and convincing standard applies to proving invalidity. CosmoKey is attempting to unfairly and unnecessarily put the thumb on the scale by continuously repeating the standard to the jury.

found in the claim need not be used. When determining whether the specification discloses the invention, the claim must be viewed as a whole.

[CosmoKey's Proposal]:³⁷ The written description requirement is satisfied if a person having ordinary skill in the art, reading the originally-filed patent application, would have recognize, from reading the specification, that the specification describes the scope of the claimed invention as it is claimed in the issued patent and that the inventor actually possessed the full scope of the invention on or before the priority date, even though the claims may have been changed or new claims added since that time. That a person having ordinary skill in the art could have envisioned the claimed invention does not satisfy the written description requirement.

[Defendants' Proposal]:³⁸ The written description requirement is satisfied if a person having ordinary skill in the art, reading the original patent application, would have recognized that the specification describes the scope of the claimed invention as it is finally claimed in the issued patent and that the inventor actually possessed the full scope of the invention on or before the priority date. That a person having ordinary skill in the art could have envisioned the claimed invention does not satisfy the written description requirement.

³⁷ CosmoKey: CosmoKey's instruction adds language that clarifies that the jury should not consider any changes or new claims to determining whether a patent sufficiently meets the written description requirement. Despite Defendants' assertion, "finally" does not provide the same clarification.

³⁸ Defendants: Defendants' Proposal is clearer and less confusing to the jury. CosmoKey's proposed instruction related to the claims changing is already encompassed by the inclusion of the words "finally claimed."

The written description requirement cannot be satisfied by any non-patent publications, such as journal articles, that are disclosed in the specification as being incorporated by reference.

[CosmoKey's Proposal]:³⁹ The exact words found in the claim need not be used. It is unnecessary to spell out every detail of the invention in the specification, and specific examples are not required. Enough must be included in the specification to convince persons of ordinary skill in the art that the inventor possessed the full scope of the invention. In evaluating whether the specification has provided an adequate written description, you may consider such factors as:

1. The nature and scope of the patent claims;
2. The complexity, predictability, and maturity of the technology at issue;
3. The existing knowledge in the relevant field; and
4. The scope and content of the prior art.

The sufficiency of the written description is decided on a claim-by-claim basis, not as to the entire patent or groups of claims.

If you find that one or more of the Asserted Claims does not comply with the written description requirement, you must find that claim is invalid.

³⁹ CosmoKey: CosmoKey's Proposal clarifies for the jury that the exact claim language need not be used when analyzing written description. Omitting this instruction is likely to confuse the jury because they may place unnecessary weight on non-substantive differences between the specification and the claim language.

7. Indefiniteness⁴⁰

Defendants contend that the Asserted Claims of the '903 patent are invalid because the language of the claims is indefinite. The patent laws have requirements for the way in which patent claims are written. Patent claims must be sufficiently clear that a person of ordinary skill in the art reading them is able to understand with reasonable certainty what the claims cover and what they do not cover. [CosmoKey's Proposal]:⁴¹⁴² The definiteness requirement focuses on whether the claims, as interpreted in view of the written description of the patent, adequately perform their function of notifying the public of the patentee's right to exclude. If a patent claim does not meet this requirement, then the claim is said to be indefinite, and the claim is invalid. [CosmoKey's

⁴⁰ This instruction is adapted from *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH (D. Del. Dec. 15, 2023).

⁴¹ CosmoKey: CosmoKey's Proposal clarifies for the jury that the focus of the definiteness requirement is on the claims, in light of the written description. Omission of this instruction may lead to confusion for the jury.

⁴² Defendants: Defendants' propose excluding this instruction. CosmoKey has cited no authority for this instruction.

Proposal]:⁴³⁴⁴ Defendants bear the burden of establishing, by clear and convincing evidence, that the Asserted Claims are indefinite.

The amount of detail required for a claim to be definite depends on the particular invention, the prior art, and the description of the invention contained in the patent. A patent claim, when read along with the rest of the patent, must reasonably inform those skilled in the art what the patent claims cover. Simply because claim language may not be precise does not automatically mean that the claim is indefinite. The claim language need only be as precise as the subject matter permits.

If you find that Defendants have proven, by clear and convincing evidence, that a person of ordinary skill in the art would not understand with reasonable certainty what is, and what is not, covered by the Asserted Claims, you must find those claims invalid.

⁴³ CosmoKey: As Defendants recognize, the jury must be instructed that Defendants must prove invalidity under the clear and convincing standard. Reminding the jury of the standard that they must use is not “unfairly and unnecessarily put[ting] the thumb on the scale.”

⁴⁴ Defendants: The jury has already been instructed that the clear and convincing standard applies to proving invalidity. CosmoKey is attempting to unfairly and unnecessarily put the thumb on the scale by continuously repeating the standard to the jury.

VI. DAMAGES

If you find that the Accused Products infringe any of the Asserted Claims, and that those claims are not invalid or were not infringed because they were in prior commercial use, you must determine the amount of damages to be awarded to Plaintiff for the infringement. By instructing you on damages, I am not suggesting which party should win this case, on any issue. If you find that each of the Asserted Claims is either invalid, was [CosmoKey's Proposal]:⁴⁵ not infringed because they were in prior commercial use, or is not infringed, then Plaintiff is not entitled to any damages.

Plaintiff must prove each element of its damages—including the amount of the damages—by a preponderance of the evidence. [Defendants' Proposal]:^{46,47} While Plaintiff is not required to prove the amount of its damages with mathematical precision, it must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

⁴⁵ CosmoKey: CosmoKey's Proposal clarifies for the jury that prior commercial use is a separate defense from general non-infringement or invalidity. Omitting this clarification risks confusing the jury.

⁴⁶ Defendants: This instruction is adapted from *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH, D.I. 314 (D. Del. Dec. 15, 2023).

⁴⁷ CosmoKey: Defendants' Proposal is superfluous. CosmoKey provides the standard for proving damages—Defendants' additions do not clarify those standards. Instead, this instruction risks confusing the jury because it suggests to the jury that there is a possibility that CosmoKey's damages are "speculative" or "based on guesswork."

If proven by Plaintiff, damages must be in an amount adequate to compensate Plaintiff for the infringement. The purpose of a damages award is to put Plaintiff in about the same financial position it would have been in if the infringement had not happened. You may not add anything to the amount of damages to punish an accused infringer or to set an example. You also may not add anything to the amount of damages for interest.

The fact that I am instructing you on damages does not mean that the Court believes that one party or the other should win in this case. My instructions about damages are for your guidance, only in the event you find in favor of Plaintiff; that is, if you find that any asserted claim is both infringed and not invalid.

1. Date Damages Begin

Plaintiff and Defendants agree that the date for the start of any damages calculation is no earlier than January 26, 2016, which is the date that the '903 Patent issued.

2. Reasonable Royalty

[CosmoKey's Proposal]:⁴⁸ If you find that any asserted claim is valid and infringed, then Plaintiff is entitled to damages, which may not be less than a reasonable royalty.

Plaintiff is claiming reasonable royalty for damages on the sales of the infringing products.

[Defendants' Proposal]:⁴⁹ If you find that any asserted claim is both infringed and not invalid, then you must consider the issue of a reasonable royalty for sales that infringed a claim of a valid patent.

A royalty is a payment made to a patent owner by someone else in exchange for the rights to make, use, sell, or import a patented product or practice a patented method. A reasonable

⁴⁸ CosmoKey: CosmoKey's Proposal is adapted from this Court's instructions in *Sight Scis., Inc. v. Ivantis, Inc.*, 21-cv-01317, ECF No. 488 at 53 (D. Del. Apr. 26, 2024). By stating that the jury must find the claim "not invalid," Defendants' instruction ignore the presumption that all patent claims are valid. Defendants' proposed instructions also do not inform the jury that Defendants must pay CosmoKey enough to compensate CosmoKey for its infringement and also that this payment may not be less than a reasonable royalty.

⁴⁹ Defendants: This instruction is adapted from *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH, D.I. 314 (D. Del. Dec. 15, 2023).

royalty may be awarded in several ways. [Defendants' Proposal]:⁵⁰⁵¹ For example, you may structure that royalty as a percentage of the revenue from infringing sales. You may also structure that reasonable royalty as a lump sum, which is a one-time, up-front payment covering all past and future infringement.

A reasonable royalty award must be based on the incremental value that the patented invention adds to the end product. When the infringing methods have both patented and unpatented features, measuring this value requires a determination of the value added by the patented features. The total royalty must reflect the value attributable to the infringing features of the method, and no more.

⁵⁰ Defendants: This instruction is adapted from *Northwestern Univ. v. Universal Robots A/S*, 1:21-cv-00149, ECF No. 369 (Sept. 19, 2024).

⁵¹ CosmoKey: CosmoKey expert will present damages based on a running royalty, not a lump sum. Because its not based on the type of damages CosmoKey's expert will discuss, Defendants' Proposal is likely to confuse the jury.

3. Reasonable Royalty Definition—Using the “Hypothetical Negotiation” Method

A reasonable royalty is the royalty that would have resulted from a hypothetical license negotiation between Plaintiff and Defendants. Of course, we know that they did not agree to a license and royalty payment. But, to decide on the amount of reasonable royalty damages, you should assume that the parties did negotiate a license at a time prior to when the infringement first began. This is why it is called a “hypothetical” license negotiation. You should assume that both parties to the hypothetical negotiation understood that the patent was valid and infringed and both were willing to enter into a license just before the infringement began. You should also assume that the parties had full knowledge of the facts and circumstances surrounding the infringement at the time of the hypothetical negotiation. [Defendants’ Proposal]:⁵²⁵³ The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty the parties would have preferred.

⁵² Defendants: This instruction is adapted from *CAP-XX, Ltd. v. Maxwell Techs, Inc.*, No. 19-1733-JLH, D.I. 314 (D. Del. Dec. 15, 2023).

⁵³ CosmoKey: Defendants’ instruction is superfluous. The jury instructions already provide the standard for determining a royalty and Defendants’ Proposal does not provide any additional clarification or context. Defendants’ Proposal also risks confusing the jury to the extent they intend to award a royalty a party would have preferred.

4. Reasonable Royalty—Relevant Factors If Using the Hypothetical Negotiation Method

In determining the amount of a reasonable royalty, you may consider evidence on any of the following factors, in addition to any other evidence presented by the parties on the economic value of the patent:

1. Any royalties received by Plaintiff for the licensing of the patent-in-suit, proving or tending to prove an established royalty.
2. The rates paid by Defendants to license other patents comparable to the Asserted Patent.
3. The nature and scope of the license, as exclusive or non-exclusive, or as restricted or non-restricted in terms of its territory or with respect to whom the method may be sold.
4. Plaintiff's established policy and marketing program to maintain its right to exclude others from using the patented invention by not licensing others to use the invention, or by granting licenses under special conditions designed to preserve that exclusivity.
5. The commercial relationship between Plaintiff and Defendants, such as whether or not they are competitors in the same territory in the same line of business.
6. The effect of selling the patented method in promoting other sales of Defendants; the existing value of the invention to Plaintiff as a generator of sales of its non-patented items; and the extent of such collateral sales.
7. The duration of the Asserted Patent and the term of the license.
8. The established profitability of the method made under the Asserted Patent; its commercial success; and its popularity.
9. The utility and advantages of the patented invention over the old modes or devices, if any, that had been used for achieving similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by or for Plaintiff; and the benefits to those who have used the invention.

11. The extent to which Defendants have made use of the invention; and any evidence that shows the value of that use

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the profit that arises from the patented invention itself as opposed to profit arising from unpatented features, such as the manufacturing process, business risks, or significant features or improvements added by the accused infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as Plaintiff) and a licensee (such as Defendants) would have agreed upon (at the time the infringement began) if both sides had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a patentee who was willing to grant a license.

16. Any other economic factor that a normally prudent business person would, under similar circumstances, take into consideration in negotiating the hypothetical license.

5. Reasonable Royalty—Apportionment

If you find that damages are appropriate, the amount you find as damages must be based on the value attributable to the patented features, as distinct from other, unpatented features of the Accused Products, or other factors such as Defendants' brand, marketing, or advertising.

[Defendants' Proposal]:⁵⁴⁵⁵ Both lump sum and running royalty theories must be apportioned. If you choose to award a running royalty, you will determine a royalty base and royalty rate. In determining the appropriate royalty base and the appropriate royalty rate, the ultimate combination of both the royalty rate and the royalty base must reflect the value attributable only to the patented technology. The process of separating the value of the allegedly infringing features from the value of all other features is called apportionment. When an accused infringing product has both patented and unpatented features, your award must be apportioned so that it is based only on the value of the patented features, and no more.

In other words, the royalty must be closely tied to the invention. It is not sufficient to use a royalty base that is too high and then adjust the damages downward by applying a lower

⁵⁴ Defendants: CosmoKey's Proposal failed to apprise the jury of apportionment's application to both lump sum and running royalties. Without an instruction on lump sum royalties, the jury may be confused and believe the Court is instructing them to take a running royalty approach.

⁵⁵ CosmoKey: CosmoKey expert will present damages based on a running royalty, not a lump sum. Because its not based on the type of damages CosmoKey's expert will discuss, Defendants' Proposal is likely to confuse the jury. As Defendants recognize, the current instructions detail how to apportion a running royalty.

royalty rate. Similarly, it is not appropriate to select a royalty base that is too low and then adjust it upward by applying a higher royalty rate. Rather, you must determine an appropriate royalty rate and an appropriate royalty base that reflect the value attributable to the patented invention alone.

6. Reasonable Royalty—Timing

The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence relevant to the negotiation is not necessarily limited to facts that occurred on or before the date of the hypothetical negotiation. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation just prior to the first infringement. You may also consider information the parties would have foreseen or estimated during the hypothetical negotiation, which may under certain circumstances include evidence of usage after infringement started, profits earned by the infringer, and non-infringing alternatives.

7. Reasonable Royalty—Availability of Non-Infringing Substitutes

In determining a reasonable royalty, you may also consider evidence concerning the availability and cost of acceptable non-infringing substitutes to the patented invention. An acceptable substitute must be a method that is licensed under the patent or that does not infringe the patent.

8. Reasonable Royalty—Use of Comparable License Agreements

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for comparable rights to similar technologies. Whether a license agreement is comparable to the license under the hypothetical license scenario depends on many factors, such as whether they involve comparable technologies, economic circumstances, structure, and scope. A license agreement need not be perfectly comparable to a hypothetical license that would be negotiated between Plaintiff and Defendants in order for you to consider it. However, if you choose to rely upon evidence from any license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between Plaintiff and Defendants, in terms of the scope of patent rights included, the technologies involved, and the economic circumstances of the contracting parties, when you make your reasonable royalty determination.

9. Willful Infringement⁵⁶

[Plaintiff's Proposal].⁵⁷⁵⁸ In this case, Plaintiff argues that Defendants willfully infringed the asserted claims of the '903 Patent.

To prove willful infringement, Plaintiff must persuade you that Defendants infringed a valid claim of the '903 Patent. The requirements for proving such infringement were discussed in my prior instructions.

In addition, to prove willful infringement of a claim, Plaintiff must persuade you that it is more likely true than not true that Defendants knew of the Asserted Patent and intentionally infringed at least one of the Asserted Claims. You must base your decision on Defendants' knowledge and actions at the time of infringement. Evidence that Defendants had knowledge of

⁵⁶ This instruction is adapted from the Northern District of California's Model Patent Jury Instructions with non-substantive alterations related to organization and grammar. *N.D. Cal. Model Patent Jury Instructions* (Oct. 2019), https://www.cand.uscourts.gov/wp-content/uploads/forms/jury-instructions/NDCA_Model_Patent_Jury_Instructions_erroneous-citation-omitted-10-28-24.pdf.

⁵⁷ CosmoKey: CosmoKey's Proposal provides relevant context and framing for the issue of willful infringement. Informing the jury of CosmoKey's claims does not "unfairly and unnecessarily put[] the thumb on the scale for Plaintiff."

⁵⁸ Defendants: This additional language unfairly and unnecessarily puts the thumb on the scale for Plaintiff. The earlier instructions already summarize each party's contentions, and there is no need to continuously repeat what Plaintiff's assertions are. Instead, these instructions should be limited to educating the jury about how to apply the law to the facts

the patent at the time of infringement by itself is not sufficient to show willfulness. Rather, to show willfulness, you must find that the Defendants engaged in additional conduct evidencing deliberate or intentional reckless disregard of Plaintiff's patent rights.

In deciding whether Defendants willfully infringed, you should consider all the facts surrounding the infringement including: whether Defendants intentionally copied Plaintiff's patented technology in developing the Accused Products; whether Defendants knew, or should have known, that its conduct involved an unreasonable risk of infringement; and whether Defendants had a reasonable belief that at the time of infringement that the Accused Products did not infringe the asserted patent.

If you determine that any infringement was willful, you may not allow that decision to affect the amount of any damages award you give for infringement.⁵⁹

⁵⁹ This instruction is adapted from *Northwestern Univ. v. Universal Robots A/S*, 1:21-cv-00149, ECF No. 369 (Sept. 19, 2024).

VII. DELIBERATION AND VERDICT

Now let me finish up by explaining some things about your deliberation in the jury room, and your possible verdicts.

Once you start deliberating, do not talk to the jury officer, or to me, or to anyone else except each other about the case. If you have any questions or messages, you must write them down on a piece of paper, sign them, and then give them to the jury officer. The officer will give them to me, and I will respond as soon as I can. I may have to talk to the lawyers about what you have asked, so it may take some time to get back to you. Any questions or messages normally should be sent to me through your foreperson, who by custom of this Court is Juror No. 1.

One more thing about messages. Do not ever write down on your message to me or tell the jury officer how you stand on your votes. For example, do not write down or say that you are split 4-4, or 6-2, or whatever your vote happens to be. That should stay secret until you are finished.

VIII. UNANIMOUS VERDICT

Your verdict must represent the considered judgment of each juror. In order for you as a jury to return a verdict, it is necessary that each juror agree to the verdict. Your verdict must be unanimous.

It is your duty, as jurors, to consult with one another and to deliberate with a view towards reaching an agreement, if you can do so without violence to your individual judgment. Each of you must decide the case for yourself, but do so only after an impartial consideration of the evidence with your fellow jurors. In the course of your deliberations, do not hesitate to reexamine your own views and change your opinion, if convinced it is erroneous. But do not surrender your honest conviction as to the weight or effect of evidence solely because of the opinion of your fellow jurors, or for the purpose of returning a verdict. Remember at all times that you are not partisans. You are judges of the facts. Your sole interest is to seek the truth from the evidence in the case.

A verdict form has been prepared for you. You will take this form to the jury room and when you have reached unanimous agreement as to your verdict, you will have your foreperson fill in, date, and sign the form. You will then return to the courtroom and my deputy will read aloud your verdict. Answer each question in the verdict form based on the facts as you find them to be, following the instructions that the Court has given you on the law. Do not decide who you think should win this case and then answer the questions accordingly.

It is proper to add the caution that nothing said in these instructions, and nothing in the verdict form, is meant to suggest or convey in any way or manner any intimation as to what verdict I think you should find. What the verdict shall be is your sole and exclusive duty and responsibility.

IX. DUTY TO DELIBERATE

Now that all the evidence is in and the arguments are completed, you are free to talk about the case in the jury room. In fact, it is your duty to talk with each other about the evidence, and to make every reasonable effort you can to reach unanimous agreement. Talk with each other, listen carefully and respectfully to each other's views, and keep an open mind as you listen to what your fellow jurors have to say. Try your best to work out your differences. Do not hesitate to change your mind if you are convinced that other jurors are right and that your original position was wrong. But do not ever change your mind just because other jurors see things differently, or just to get the case over with. In the end, your vote must be exactly that, your own vote. It is important for you to reach unanimous agreement, but only if you can do so honestly and in good conscience.

No one will be allowed to hear your discussions in the jury room, and no record will be made of what you say. So you should all feel free to speak your minds. Listen carefully to what the other jurors have to say, and then decide for yourself.

X. SOCIAL MEDIA

During your deliberations, just as during trial, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, a cell phone, smartphone, iPhone, iPad, Blackberry, tablet or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog or website such as Facebook, LinkedIn, YouTube, Instagram, WeChat, WhatsApp, Snapchat or X (formerly Twitter) to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations.

XI. COURT HAS NO OPINION

Let me finish by repeating something I said to you earlier. Nothing that I have said or done during this trial was meant to influence your decision in any way. You must decide the case yourselves based on the evidence presented.